## Overview of Coastal Pelagic Species Fisheries Management Plan

By

Doyle A. Hanan, PhD.
California Department of Fish and Game
Marine Region
8604 La Jolla Shores Drive
La Jolla, California 92037-1508

May 16, 2000

The Coastal Pelagic Species Fisheries Management Plan (CPS FMP) was proposed and implemented as Amendment 8 to the Northern Anchovy Fishery Management Plan, which was first developed in 1977, implemented in 1988, and amended several times. Amendment 8 was the most extensive amendment and resulted in the name change to CPS FMP. The impetus for developing Amendment 8 was an expression of concern by the State of California to the Pacific Fisheries Management Council regarding the increasing range of Pacific sardine to include British Columbia, Canada, and the Baja California, Republic of Mexico; the State's inability to implement transboundary international fisheries management, as well as, coordination of interstate fisheries management with Oregon and Washington. Another justification cited by California was the increasing involvement of fishing vessels from Oregon, Washington, and Alaska in the Southern California market squid fishery which was expanding at a high rate during the mid-1990's.

The CPS FMP added four species not covered by the northern anchovy FMP to include most of the species fished by the round-haul fleet except for highly migratory species. Those covered by the CPS FMP:

Pacific sardine Sardinops sagax
Pacific mackerel Scomber japonicus
Northern anchovy Engraulis mordax
Market squid Loligo opalescens
Jack mackerel Trachurus symmetricus

In this FMP, management is divided into "active" and "monitored" categories. Pacific mackerel and Pacific sardine are "actively" managed, requiring annual stock biomass assessments and setting of harvest guidelines (similar to a quota) based on MSY control rules (harvest formulae). The other "monitored" species are managed by the Council via annual status reviews and applicable management measures such as gear and area restrictions. An annual Stock Assessment and Fisheries Evaluation (SAFE) report will produced by the Council for all CPS stocks.

The CPS FMP is established as a framework process for operational aspects of management and revision. There are two mechanisms for promulgating change within the FMP: 1) a Point-of-Concern Framework used for resource or ecological issues and 2) a Socio-economic Framework for non-biological issues. Each of these mechanisms can be handled by the Council depending on potential magnitude as routine/automatic actions, notice actions, abbreviated rulemaking actions, or full rulemaking actions.

The CPS FMP establishes a limited entry fishery south of 39 degrees north latitude (Pt. Arena California) and a 125 metric ton landing limit for the four species of fish, but specifically does not include fishing for market squid. A five-year qualifying period (January 1, 1993 through November 5, 1997) was established during which a vessel must have landed 100 metric tons of CPS fish to obtain a permit renewable every two years. Permits are fully transferable during the year 2000 after which they transferable only if the permitted vessel is lost, stolen, or incapable of fishing in a federal fishery. Sport fishing, bait fishing, and catches of less than 5 metric tons are exempted from limited entry provisions.

The general form for the MSY control rule for "actively managed" CPS stocks is designed to continuously reduce exploitation rate as biomass declines:

## $H = (BIOMASS-CUTOFF) \times FRACTION$

where H is the harvest target level, CUTOFF is the lowest level of estimated biomass above which a harvest is allowed and FRACTION is the fraction of the biomass above the cutoff that can be taken by the fishery. The default MSY control rule for "monitored" stocks sets ABC equal to 25 percent of the best estimate of the MSY catch level.

For Pacific sardine, the CPS FMP sets ABC based on estimated biomass for the whole sardine stock with CUTOFF equal to 150,000 metric tons, FRACTION between five percent and 15 percent (dependant on three year average water temperature), and a harvest target up to a MAXCAT of 200,000 metric tons (maximum harvest level allowed independent of estimated biomass). ABC is calculated from the target harvest for the whole stock and prorating the proportion of total biomass in US waters.

For Pacific mackerel the CPS FMP sets CUTOFF and definition of over fished stock at 18,200 mt and FRACTION at 30%. Over fishing is defined as any fishing in excess of ABC calculated using the MSY control rule. No MAXCAT is defined because the U.S. fishery appears to be limited to about 40,000 mt per year by markets. Harvest level is defined for entire stock in Mexico, Canada, and U.S. waters and U.S. target harvest level prorated based on relative abundance in U.S. waters.

There are several issues which are currently being deliberated by the Council mainly because the CPS FMP is new having been implemented January 1, 2000. Briefly those issues are:

- Bycatch provisions: these are being redrafted for the plan to better describe bycatch in the CPS fishery,
- 2 Market squid MSY: a definition is being prepared,
- 3 Market Squid ABC: the 25 percent default rule is being considered for change possibly to a higher level,
- 4 Limited Entry Capacity or Number of Vessel Goals: these are being defined along with mechanisms for achieving and maintaining them,
- Vessel Transfer Rules: being reviewed to exam whether they can be modified to better accommodate fishermen fishing in both the CPS limited entry fishery and the State of California's market squid fishery,
- North-South Allocation: a separate CPS allocation for Oregon and Washington is being discussed.